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EXAMINER	
RUTTEN, JAMES D	

ART UNIT	PAPER NUMBER
2192	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/972,076	JOHNSON ET AL.	
	Examiner	Art Unit	
	James D. Rutten	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 November 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *107 and 108* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *107 and 108* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the 11/10/2010 filing which amended claim 107, added claim 108, and canceled claims 84-106. Claims 107 and 108 remain pending and have been examined.

Response to Arguments/Amendment

2. All previous rejections with respect to claims 84-106 have been withdrawn in light of the cancellation of those claims.

3. Applicant's arguments filed 11/10/2010 have been fully considered but they are not persuasive. On page 7, Applicant argues that the prior art of record, in particular the Berg reference, does not teach newly claimed limitations. However, a reasonable broad interpretation of the claim allows Berg to teach the limitations, as further described in the rejection below.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 107 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,546,545 to Honarvar et al. ("Honarvar") in view of U.S. Patent 6,466,971 to Humpleman et al.

("Humpleman"), U.S. Patent 5,999,911 to Berg et al. ("Berg"), and U.S. Patent 5,465,258 to Adams ("Adams").

In regard to claim 107, Honarvar discloses:

A method for developing rules using a decision engine, (see Honarvar Fig. 8) the method being implemented by one or more data processors (See Honarvar Fig. 22) and comprising:

Honarvar discloses model files (e.g. see Fig. 16, look-up table 240 and associated text). Honarvar does not expressly disclose: converting, by at least one data processor, model files into data with a model editor component; organizing, by at least one data processor, the data according to hierarchical structures; importing, by at least one data processor, the data into a designer component; However, Humpleman et al. teaches sending XML input data (e.g., see commands/XML FIG.14 & associated text, see XML-RPC Action FIG.19) from an end user/client system (e.g., see A FIG. 14 & associated text, see HN Device A: Controller Module FIG.19 & associated text) to a decision server (e.g., see S FIG.14 & associated text, see HN Device B: Controller Module FIG.19 & associated text) via a web server (e.g., see server 14 FIG.14 & associated text, see HN Device Web Server 86 FIG.19 & associated text). Humpleman et al. further discloses generating an XML schema for providing to the client system for collecting said input data and providing to Web server for use in error handling, or data validation (e.g., see CALL.DTD & INTERFACE.DTD & Web Server Layer FIG.18 & associated text, see Device A XML Interface 72 FIG.19 & associated text) and generating an XML parser

(e.g., see XML Layer IN 70 & XML Layer OUT 68 FIG.18 & associated text, see XML parser 74 FIG.19 & associated text) for reading data conforming to said XML schema. Note that XML parser 74 must first be generated before being used. It would have been obvious to one of ordinary skill in the pertinent art at the time the invention was made to modify Honarvar's models to include the teaching as set forth by Humpleman to produce the expected result with reasonable success. And the motivation for doing so would have been that the formatting of data into syntactically correct XML document(s) depends upon adhering to a predefined definition language describing the structure and set of constraints (i.e., XML schema) on which an XML documents shall be constructed from said data. Furthermore, XML parsers enable the processing and extracting of data in textual representation within XML tags and transforming them into specific-typed objects/data structure (e.g., C, C++, or Java objects) which can be retrieved for use by servers and software applications. XML parsers check XML documents being parsed for conformance to XML rules. Most recent XML parsers, at the time the invention was made, are implemented with integrated support for XML schemas to further enable data validation.

Honarvar discloses:

defining, by at least one data processor, projects with workflow functional components, the workflow functional components being reusable within a project and defining a process or action to be carried out. See Fig. 8 which depicts workflow functional components which defines the flow of the system. Note that at least element

170 is depicted with input and output which provides a broad interpretation of being reusable.

Honarvar does not expressly disclose the additional claimed elements associated with the workflow functional components, such as expression sequences, segmentation trees, and workflow lists. However, Berg teaches interactive creation of workflow using expression sequences and segmentation trees. See at least column 4 lines 14-17, i.e. “interactively create a workflow definition."

Berg further teaches the following elements in terms of workflow:

expression sequences that assign values to local fields and provide means for modifying local field values,... assigning, by at least one data processor, values to local fields and modifying local field values with the expression sequences;... See Berg Figs. 5 and 6, also see associated text in at least column 9 lines 18-20: "When the designer clicks on a graphic representing a step in the flow builder, the flow builder displays a "BASIC ATTRIBUTES" dialog box as shown in FIG. 5." The field values are saved as expression sequences in text based flow definition language as described in column 9 lines 63-66.

segmentation trees each having decisioning branches with leaf nodes, ... creating, by at least one data processor, project workflow with the segmentation trees; See Berg Fig. 4; also see the associated text in at least column 9 lines 8-11, e.g. "To create a step, the designer can select one of the step icons, which include a task step 104, an activity step 106, a decision step 108, and a subflow step 110." Designers create workflow by using the "segmentation trees" shown in Fig. 4. Note also that the segmentation tree in

Fig. 4 provides decisioning branches (see at least Fig. 4 element 118) and leaf nodes (see Fig. 4 elements 116h, and the unnumbered element following the "No" decision of element 118). and

workflow lists that identify a set of steps to be processed during runtime execution, the workflow lists comprising a plurality of list items pointing to a particular workflow functional component;... ...identifying, by at least one data processor, a set of steps that are processed during runtime execution with the workflow lists; See Berg, Fig. 7 which depicts workflow lists similar to those shown in Fig. 4 of the instant application, including list items which point to particular functional components.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Honarvar's projects and workflow functional components with Berg's workflow elements in order to describe basic attributes of steps in a workflow, define the appearance of a workflow, and specify actions for the steps in the workflow as suggested by Berg at column 9 lines 3-6.

Honarvar further discloses:

designing, by at least one data processor, rules; generating, by at least one data processor, rules, models, and strategies with graphical user interfaces; See Fig. 23 and associated text at column 20 lines 62-67, e.g.:

> …a system user enters **strategies**, edits strategies, selects strategies, and defines versions, by entering information **in a GUI** 450 running on workstation 400. The strategies and associated information entered in GUI 450 are stored in a relational data **model** 452.

Note that the "strategies" and model are interpreted simply as the rules, as directed on page 20 lines 23-25 of Applicant's originally filed specification.

producing, by at least one data processor, a predictive score at runtime for a given transaction with the models; Honarvar teaches the use of scores using transaction models. See at least Fig. 4(A), element 93, e.g. "Risk Score."

testing, by at least one data processor, the rules by tracking statistics on which rules, models, and strategies were used ...Honarvar teaches tracking statistics on which strategies were used and how many times. See column 5 lines 26-63, also column 6 lines 56-65, e.g. "monitors performance."

Honarvar does not expressly disclose statistics on how many times. However, Adams teaches that tracking execution counts are common statistical information. See at least column 1 lines 37, e.g. "execution counts." It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Honarvar's testing with Adams' execution counts in order to provide performance evaluation as suggested by Adams at column 1 lines 34-37.

Honarvar further discloses:

modifying the rules, models, and strategies based on the testing. See Honarvar column 5 line 67 - column 6 line 2, e.g. "formation of a hybrid strategy." Also see column 6 lines 63-65, e.g. "refines the selected strategy version in accordance with the monitored performance."

6. Claim 108 is rejected under 35 U.S.C. 103(a) as being unpatentable over Honarvar, Humpleman, Berg, and Adams as applied in the above rejection of claim 107, and further in view of U.S. Patent No. 6,199,068 to Carpenter ("Carpenter").

In regard to claim 108, Honarvar, Humpleman, Berg, and Adams do not expressly disclose: *...the workflow lists being references by a segmentation tree leaf node...* However, Carpenter teaches segmentation tree leaf nodes which reference workflow lists. See Fig. 30 and related text at col. 21 line 66 - col. 22 line 15, e.g.:

> ...In this example, a ModifyMeter workflow is illustrated with three main paths of execution. The first is a Normal path (STS_NORMAL) which translates into a simple update in the database 120. The second is a Move to Non-communicative (STS_MOVE_TO_NONCOMMUNICATIVE), which lists required tasks that must complete in order to successfully run workflow. The third is a Move to Communicative (STS_MOVE_TO_COMMUNICATIVE), which lists required tasks that must complete in order to successfully run workflow. Traversing of various paths (decisions) is based on statuses returned at each individual decision point....

As described in the above passage, the segmentation tree provides decision nodes which then effectively provide a terminal leaf node reference to a workflow list. A reasonable broad interpretation allows Carpenter to teach the claimed limitations. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Berg's segmentation trees with Carpenter's workflow list reference in order to provide a graphical depiction of workflow paths as suggested by Carpenter (see Carpenter col. 21 lines 66-67).

All further limitations have been addressed in the above rejection of claim 107.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James D. Rutten whose telephone number is (571)272-3703. The examiner can normally be reached on M-F 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571)272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James D. Rutten/
Primary Examiner, Art Unit 2192